Electronic Reporting Tool

Software to Standardize Source Test Planning, Reporting and Assessment

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OAQPS/SPPD/MPG

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Presentation Topics

- **Test Reporting History**
- **Test Report Workflow**
- **Test Report Uses**
- **Problem Areas**
- **A Solution of One**
- **Future**

History

- **1970's**
  - **Paper, pencil, nomagraphs, slide rules**
- **1980's**
  - **Paper, pencil, nomagraphs, calculators**
- **1990's**
  - **Paper, pencil, computers**

Test Report Workflow

- **Draft Plan - paper**
- **Wait for comment – paper approval**
- **Conduct test – paper report**
- **State Agency observes test – paper**
- **Assess validity of report**
  - **Transcription of data**
- **Acceptance of data – paper report**
- **Report results to EPA**
  - **Transcription of information**

Test Report Uses

- **Compliance certification**
- ~~**Permit applications or revisions**~~
- ~~**Permit fee determination**~~
- ~~**Emissions Inventory**~~
- ~~**Performance Information**~~
- ~~**Modeling**~~
- ~~**Risk Assessment**~~
- ~~**Environmental Justice Issues**~~
- ~~**TRI – CERCLA – SARA**~~
- ~~**AIRS-AFS reporting**~~
- ~~**Complaint Evaluations**~~

Areas of Opportunity

- **Improve coordination**
- **Reduce duplicative work**
- **Standardize reports**
- **Improve information flow**
- **Reduce storage space**
- **Improve documentation**
- **Improve & standardize QA**

The Electronic Reporting Tool

- Replaces resource intensive manual manipulation of paper reports
- Provides for single location for planning, calibration, field sampling, field inspection, data quality assessment documentation
- Highlights need for most critical data requirements
- Facilitates coordination between source and State
- Standardizes several components of documentation
- Provides for electronic transmission of information

Test Plan Title: Emissions Testing of Wood Chip Dryer 2   **Test Plan Date:** 5/25/2005

| Facility/Permit | Regulations | Process/APCD | Locations/Methods | Methods cont. | Audit/Calibrations | Schedule | Signatures | Attach. |

1. What is the specific purpose for the proposed testing?

"Determine compliance with NSPS and State SIP emissions limitations
Establish CAM monitoring parameters as stated in Title V permit"

2. List all state and federal regulations that apply to the proposed testing:

"40CFR60 Subpart XXX - Filterable PM limitation of 0.019 lb/ton of dried wood
25NC666.234-2 - Filterable PM limit of 0.5 lb/ton feed
25NC7725-3 - Condensable Organic PM limit of 0.5 lb/ton feed"

3. Will the test results be used for other regulatory purposes (e.g., emission inventories, permit applications, etc.) beyond that stated above?   If yes, explain.

Results will be used for establishing total PM (filterable and condensable) emissions as required by State for Consolodated Emissions Reporting

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ENVIRON

Test Plan

| Test Plan Title: | Emissions Testing of Wood Chip Dryer 2 | Test Plan Date: | 5/25/2005 |

Facility/Permit | Regulations | **Process/APCD** | Locations/Methods | Methods cont. | Audit/Calibrations | Schedule | Signatures | Attach.

4a. Enter the process data to be documented during testing. (note: required before test data entry)

	Process Parameter	Units	TargetValue	comments
▶	Natural Gas Fuel Flow|	Ft^3/min	25	
	Dryer Outlet Temperature	deg F	325	
	Dryer Wood Feed	Tons/Hr	125	

Record: ◄◄ ◄ 1 ► ►► ►* of 5

4b. Enter the process lab data to be documented during testing. (note: required before test data entry)

	Analysis Required	Units	Comments
▶	Wood Moisture Content of feed material	percent	
	Wood Moisture Content of product	percent	
	Wood density of feed material	lb/ton	
	Wood density of product	lb/ton	

Record: ◄◄ ◄ 1 ► ►► ►* of 4

5a. Please give a brief description of the source (including control equipment) and attach source or process flow diagram: Attach File

"PROCESS DESCRIPTION
Figure 2-1 illustrates the basic processing steps for OSB production. The steps are:
    Logs are slashed, debarked, cut into shorter lengths, and sliced into thin wafers.

5b. Control Devices: (note: required before test data entry)

	Control Device Parameters	Units	TargetValue	comments
▶	PM - Electrified Filter Bed - Filter bed voltage, current, and temperature		0	
	PM - Electrified Filter Bed - Gas flow rate		0	
	PM - Electrified Filter Bed - Inlet gas temperature		0	

Record: ◄◄ ◄ 1 ► ►► ►* of 5

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Test Plan

Test Plan Title: Emissions Testing of Wood Chip Dryer 2   **Test Plan Date:** 5/25/2005

Facility/Permit | Regulations | Process/APCD | **Locations/Methods** | Methods cont. | Audit/Calibrations | Schedule | Signatures | Attach.

6. Please enter sampling location information. (all dimensions in inches)
(note: required before test data entry)

	Location	Num. Points	# of Ports	Rnd. Duct Diam.	Duct Len.	Duct Widtl	Equiv. Diam	Up Stream Dist	Dwn
▶	Inlet	16	2	19.5	0	0	0	280	
	stack	16	2	72	0	0	0	280	
*		0	0	0	0	0	0	0	

Record: |◀ ◀ [1] ▶ ▶| ▶* of 2   ◀ [====] ▶

(Note: UpStreamDist = Distance from upstream disturbance
DwnStreamDist = Distance from downstream distuburbance)

7. Please provide the following information for each test parameter.
(note: required before test data entry)

	Location	Target Parameter	Test Method	Num Test Runs	Test Run Duratior	Comments
▶	Inlet	Filterable Particulate	m5	3	64	
	stack	Filterable Particulate	m5	3	64	one train for all
	stack	Inorganic Condensible Particulate	m202	3	64	
	stack	Organic Condensible Particulate	M315	3	64	
	stack	Total Particulate		3	64	
*				0	0	

Record: |◀ ◀ [1] ▶ ▶| ▶* of 5   ◀ [====] ▶

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Facility/Permit | Regulations | Process/APCD | Locations/Methods | Methods cont. | Audit/Calibrations | Schedule | Signatures | Attach.

8. Describe below or attach complete documentation of all modifications and/or deviations to the applicable test methods. If alternative methods requested, attach documentation of request AND approval, including dates.   [Attach File]

> Instead of using the procedures prescribed in NC rule 25NC7725-3, we propose using a combination of Method 202 and Method 315 procedures. These include purging with Nitrogen and the use of Methelene Chloride as the extracant. In addition, we propose to use acetone as a finish solvent following the Methelene

9. Does the proposed sampling location meet the minimum EPA Method 1 criteria for acceptable measurement sites? Please list below or attach the supporting documentation.   [Attach File]

☐ Yes ☑ No

10. Has absence of cyclonic flow been verified per EPA Method 1 (Section 2.4)? If no, absence of cyclonic flow must be verified prior to testing. If yes, please attach supporting documentation.   [Attach File]

☐ Yes ☑ No

> Cyclonic flow will be determined as part of the initial velocity traverse

11. Select the method that will determine the oxygen concentration :

M3A-instrumental

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Test Plan Review

Test Plan Title: Emissions Testing of Wood Chip Dryer 2   **Test Plan Date:** 5/25/2005

Facility/Permit | Regulations | Process/APCD | Locations/Methods | Methods cont. | Audit/Calibrations | Schedule | Signatures | Attach.

Facility Name:

Environ Mental Concious Furniture Co.

Address: 666 66th St N Ave

City: Boisenberry

State/Zip: NC   27854-4866

Contact: Enviro M. Concious

Phone: (919) 666-2626

Fax: (919) 666-6262

email: enviro.concious@enviroconcious.com

Industry /SCC/NAIS: 30701415

FINS: 27562

Latitude:

Longitude:

Testing Company:

Monitoring Policy Group

Address: OAQPS/SPPD (D205-05)

City: Research Triangle Park

State/Zip: NC   27711

Contact: Barrett Parker

Phone: (919) 541-5635

Fax: (919) 541-1065

email: parker.barrett@epa.gov

Facility Info:
☑ Yes   ☐ No

Add/View Comment

Test Co. Info:
☑ Yes   ☐ No

Add/View Comment

Air Permit Number: NC666-1234

Permitted Source ID and Name: DR2   Dryer 2

Permitted Maximum Process Rate: 175 Tons per Hour

Maximum Normal Operation Process Rate: 150 Tons per Hour

Target Process Rate for Testing: 125 Tons per Hour

Source info:
☑ Yes   ☐ No

Add/View Comment

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Run Data Details

Facility: Environ Mental Concious Furniture Co.

Permitted Source ID/Description: DR2 | Dryer 2

Location: stack

[Add New Run Data] [Delete Run Data]

Header Data | **Point Data** | Lab Data | Sampling/Stack Data Results | Emissions

RunNumber:	RunDate:	JobNumber:	Method:
1	12/23/2004	s608.001	m5/202

BeginTime	EndTime	Clock	GasMeter	Velocity	StackTemp	DryGasInlet	DryGasOu
0	4	12:02:00 PM	703.127	0.32	167	79	
4	8	12:06:00 PM	705.411	0.32	168	80	
8	12	12:10:00 PM	707.696	0.33	169	80	
12	16	12:14:00 PM	709.980	0.33	169	81	
16	20	12:18:00 PM	712.265	0.27	169	83	
20	24	12:22:00 PM	714.549	0.27	169	84	
24	28	12:26:00 PM	716.834	0.22	167	86	
28	32	12:30:00 PM	719.118	0.22	166	87	
32	36	12:41:00 PM	721.403	0.3	164	88	
36	40	12:45:00 PM	723.687	0.3	168	89	
40	44	12:49:00 PM	725.972	0.31	169	90	
44	48	12:53:00 PM	728.256	0.31	169	91	
48	52	12:57:00 PM	730.540	0.28	169	92	
52	56	1:01:00 PM	732.825	0.28	169	93	

Run Data Details

Facility: Environ Mental Concious Furniture Co.

Permitted Source ID/Description: DR2 | Dryer 2

Location: stack | Add New Run Data | Delete Run Data

Header Data | Point Data | Lab Data | Sampling/Stack Data Results | Emissions

RunNumber:	RunDate:	JobNumber:	Method:
1	12/23/2004	s608.001	m5/202

Sampling Train Parameters:

NetRunTime:	54
NetTravPts:	16
Dn:	0.297
Cp:	0.84
Y:	0.991
Pb:	30.04
DeltaH:	1.07
Vm:	36.980
tm:	84.66
Vmstd:	35.762
Vlc:	461.9
Vwstd:	21.74
% I:	107.0

Stack Gas Parameters:

% H2O:	37.81	Vs:	34.44
% H2Osat:	38.04	Dstk:	72
Mfd:	0.6219	Dwdth:	0
% CO2:	7	Dlngth:	0
% O2:	13.2	As:	28.274
% CO + N2:	79.8	Qsd:	30,697.9
Fo:	1.10	Qaw:	58,425.4
Md:	29.65		
Ms:	25.25		
Pg:	-0.18		
Ps:	30.03	View All Runs	
ts:	167.25		
DeltaPavg:	0.278		

Record: |◄ ◄ 1 ► ►| ►* of 3

State Review of Test Report

Facility: Environ Mental Concious Furniture Co.

Permitted Source ID/Description: DR2 | Dryer 2

Location Inlet

| Process DQQs | Run DQQs | Average Emissions |

RunNumber:	RunDate:	JobNumber:	Method:
In-m5-1	9/8/2005	s608.001	m5

	ID	Question	U % Adj	Value (Y/N)
	8	Is the pitot calibration data missing or outside of the specifications ?	+ 75	y
	9	Is the pitot tube coefficient different from 0.84, 0.99, or calib data?	+ 2	y
	10	Are the thermocouple devices calibration data missing or outside of specs?	+ 75	y
	11	Is the flow rate more than 30% different from previous test?	+ 5	y
	12	Is the mass determined gravimetrically < 10 mg?	+ 3	y
	13	Is the leak check info missing or > 0.02 cfm?	+ 2	y
	14	Is the DGM calibration data missing or outside of specs?	+ 75	y
	15	Is the isokinetic sampling rate < 90 or > 110 %?	+/- 2	y
	16	Is the nozzle calibration data missing or outside of specs?	+ 75	y
	17	Is the raw field data missing?	+ 100	y
	18	Is the laboratory report insufficiently detailed or missing?	+ 100	y

State Review Run Status:

Record: ◄◄ ◄ 1 ► ►► ►* of 3

Record: ◄◄ ◄ 1 ► ►► ►* of 2